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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|------------------------------|------------------|
| 10/015,778 | 12/17/2001 | Douglas D. Sjostrom | 02-35-0385 / 00167-456001 | 4406 |
| 7590 07/13/2005 | | | EXAMINER | |
| JOEL R. PETROW Smith & Nephew, Inc. 1450 Brooks Road Memphis, TN 38116 | | | NGUYEN, VI X | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 3731 | |

DATE MAILED: 07/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/015,778

Applicant(s)

SJOSTROM, DOUGLAS D.

Examiner

Victor X. Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 April 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 18-60 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 18-60 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|--|
| <p>1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)</p> <p>2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)</p> <p>3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.</p> | <p>4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.</p> <p>5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)</p> <p>6) <input type="checkbox"/> Other: _____.</p> |
|--|--|

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 18-24 and 60 are rejected under 35 U.S.C. 102(b) as being anticipated by Kudla (U.S. 5,203,653).

Kudla discloses in figs. 1-4, a method of cutting, including: slicing into tissue with a helical knife or reamer (see col. 2, lines 42-46) to draw tissue proximally toward a sharp cutting edge (at R3 fig. 3b), where the helical knife or reamer has a slicing edge that extending through an opening (occurs at a trailing edge 16) at least partially bounded by the sharp cutting edge, where a slicing action between the cutting head portion (12) and each of the helical slots or grooves (14) would inherently take place by cutting the tissue with the sharp cutting edge. As to claims 20-24, providing the helical knife on an inner member or drive shaft (not shown) and the sharp cutting edge on an outer member (32).

Claims 18-24,25-43,45-60 are rejected under 35 U.S.C. 102(b) as being anticipated by Banko (U.S. 3,732,858).

Banko discloses in figs.10,12, col. 3, lines 64-67, col. 4, lines 5-10 and lines 23-31, a surgical cutting instrument having the limitations of the above listed claims, including: a cutting instrument comprises an outer member (52b) has an opening (at the tip of passage means 40b)

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bounded by a sharp cutting edge (the sharp cutting edge is considered at the tip of segment 78b), where a helical knife (130) coupled to the outer member for rotation relative to the outer member. The helical knife (130) would inherently has an edge to slide into tissue to draw the tissue proximally along the helical knife towards the sharp cutting edge. Further, it is noted that fig. 10 of Banko can be clearly defined an inner member (42b) including a shaft having a helical knife (130) with a v-shaped (v-shaped is considered from the left end of helical knife 130b to the right end of segment 130b) that defined a sharp, slicing edge.

Regarding claims 26-27, wherein the edge of helical knife (130) extends distally through the opening; and where the cutting edge and the edge of helical knife configure to cut tissue.

Regarding claims 33-34 and 50-51, where the device further includes a hub (68), where the outer member (52b) defines a fluid. The cutting edge is located at a distal end of the outer member. The outer member tapers to the cutting edge (fig. 10).

Regarding claims 18-24 and 60, Banko is capable of performing the method steps as claimed in figs.10,12, col. 3, lines 64-67, col. 4, lines 5-10 and lines 23-31.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 44 is rejected under 35 U.S.C. 103(a) as being unpatentable over Banko (U.S. 3,732,858).

Banko discloses the invention substantially as claimed. Although, Banko does not disclose the inner member and the outer member is in the range of about 0.0005 to 0.002 inches. It would have been obvious matter of design choice to modify the inner member and the outer member is in the range of about 0.0005 to 0.002 inches, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. In re-Aller, 105 USPQ 233.

Response to Amendment

3. Applicant's arguments with respect to claims 18, 25, 42 and 59-60 have been considered but they are not persuasive. Applicant is asked to please refer to the modified prior art rejection above wherein examiner addresses applicant's concerns regarding prior art rejections.

Conclusion

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Victor X Nguyen whose telephone number is (703) 305-4898.

The examiner can normally be reached on M-F (8-4.30 P.M).

The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Victor X Nguyen
Examiner
Art Unit 3731

Vn *VH*
7/11/2005

Julian W. Woo

JULIAN W. WOO
PRIMARY EXAMINER